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Abstract

**PURPOSE:** To provide a cantilever for scanning probe microscope which can make high-resolution SPM measurement, and provide also its manufacturing method.

**CONSTITUTION:** A cantilever for scanning probe microscope is manufactured in such a way that, after a bonded substrate 108 is obtained by sticking a second substrate 106 to an oxide film 104 formed on one surface of a first substrate 102, the substrate 106 is shaped in the shape of a lever section and an oxide film 112 is formed on the side end face of the lever section. Then a probe section is formed at part of the lever section after etching the substrate 106 to a prescribed thickness and an oxide film 118 is formed on the surface of the substrate 106. After forming the film 118, a supporting section is formed in the substrate 102 and part of the oxide film 104 formed on the surface of the substrate 102, oxide film 112 formed on the side end face of the lever section, and oxide film 118 formed on the surface of the substrate 106 are removed.